



NAME OF LABORATORY: Musculoskeletal Research Laboratory

PI: Dr. Oleg Dolkart PhD

Director Department: Dr. Eran Maman MD

Research Objectives: Our research interests focus on optimizing biological treatments capable of improving tendon-bone interface and promoting improved healing. We use rat models to research rotator cuff tears and the influence of various drugs/materials (PRP, steroid, NSAID, statins) on tendon to bone healing in terms of histology and biomechanics. Our Lab has pioneered new research regarding the influence of statins with or without NSAID drugs on tendon to bone healing in repaired rotator cuff tendons.

Main Research topics:

- Inflammation in tendon healing (COX-PGE pathway)
- The role of the commonly used medications on tendon to bone healing (statins, NSAIDs, steroids)
- Biologic augmentation of the tendon to bone healing (PRP)
- Fatty infiltration of the rotator cuff muscle
- Aging and gender influences on tendon (Sex Hormones, Calcitropic Hormones)

Staff: Oleg Dolkart PhD, Ofir Chechik MD, Eran Maman MD

Active Grants:

- **IDF** – Israeli Defense Foundation

Collaborations:

- Institute of Endocrinology, Metabolism and Hypertension, Tel- Aviv Sourasky Medical Center.
- Biomechanics laboratory, School of Dental Medicine, Tel Aviv University.
- The Laboratory of Microsurgery and Plastic Surgery, Tel- Aviv Sourasky Medical Center.
- McKay Orthopaedic Research Laboratory, Perelman School of Medicine, University of Pennsylvania.
- Experimental Surgery and Regenerative Medicine, Tendon Research Group, Department of Surgery Ludwig-Maximilians-University, Munich, Germany.

Contact us:

Oleg Dolkart, PhD

Tel. +972-3-6973920

Mobile: +972-(0)524-262544

Email: dolkarto@gmail.com, olegd@tlvmc.gov.il